

WHAT IS CLAIMED IS:

1. A display device comprising:

5       lines connected to pixels formed on an insulating substrate;

      a lead line connected to at least one of the lines in a peripheral area of the insulating substrate different from a display area comprising the pixels;

10      a line terminal connected to at least one of the lead line and connected to a terminal of a drive circuit mounted directly in the peripheral area of the insulating substrate by a conductive material through a transparent conductive film;

15      an external terminal formed on a periphery of the peripheral area of the insulating substrate, to be connected to an external unit;

      an external line connected to at least one of the external terminal; and

20      an external line terminal connected to at least one of the external line and connected directly to a terminal of the drive circuit by a conductive material,

25      wherein a surface of the line terminal to be connected to the transparent conductive film is formed by a high resistance conductive film, and a

surface of the external line terminal to be connected to the terminal of the drive circuit by the conductive material is formed by a low resistance conductive film.

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2. A display device according to Claim 1, wherein the high resistance conductive film is a selected one of Cr, Ti, Ta, Mo, W, Ni, an alloy of those metals, and a laminated film of those metals, and the low resistance conductive film is a selected one of Al, Cu, Au, Ag, an alloy of those metals, and a laminated film of those metals.

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3. A display device according to Claim 1, wherein the high resistance conductive film is a selected one of Cr, Ti, Ta, Mo, W, Ni, an alloy of those metals, and a laminated film of those metals, and the low resistance conductive film is a selected one of Al and an alloy of Al.

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4. A display device according to Claim 1, wherein the external line and the external line terminal are formed by the same layer of a conductive film as a scan line for driving the pixels.

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5. A display device according to Claim 1,

wherein the lead line and the line terminal are formed by the same layer of a conductive film as a signal line crossing a scan line for driving the pixels through an insulating film.

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6. A display device according to Claim 1, wherein the transparent conductive film is formed by the same layer of a conductive film as a pixel electrode of the pixel.

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7. A display device according to Claim 1, wherein a terminal of the drive circuit and a terminal of an adjacent drive circuit are connected to each other in such a way that each of the terminals is directly connected to the low resistance conductive film by a conductive material in a near proximity to each of sides of the drive circuits facing each other.

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8. A display device according to Claim 1, wherein the terminal of the drive circuit connected to the line terminal through the transparent conductive film is formed in a near proximity to a side of the drive circuit close to the display area.

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25 9. A display device according to Claim 1, wherein the external terminal is formed in an area

between the drive circuit and the adjacent drive circuit.

10. A display device according to Claim 1,  
5 wherein the external terminal is connected directly  
to an external unit by a conductive material formed  
in the same step as the conductive material used for  
connecting the terminals of the drive circuit mounted  
directly in the insulating substrate to the line  
10 terminal and to the external line terminal.

11. A display device according to Claim 1,  
wherein the terminal of the drive circuit connected  
to the line terminal by the conductive material  
15 through the transparent conductive film and the  
terminal of the drive circuit connected directly to  
the external line terminal by the conductive material  
have a difference in height, which is substantially  
equal to a difference in height of the transparent  
20 conductive film on the line terminal, and the  
external line terminal, formed above the insulating  
substrate and connected respectively to the  
terminals of the drive circuit.

25 12. A method of manufacturing a display device  
including lines connected to pixels formed on an

insulating substrate, a lead line connected to at least one of the lines in a peripheral area of the insulating substrate different from a display area comprising the pixels, an external terminal formed 5 on a periphery of the peripheral area of the insulating substrate, to be connected to an external unit, and an external line connected to at least one of the external terminal, comprising the steps of:

10 forming a line terminal connected to at least one of the lead line in the peripheral area of the insulating substrate by depositing and patterning a high resistance conductive film;

15 forming an external line terminal connected to at least one of the external line by depositing and patterning a low resistance conductive film;

connecting the line terminal and a terminal of a drive circuit directly mounted in the insulating substrate by a conductive material through a transparent conductive film; and

20 connecting the external line terminal and a terminal of the drive circuit directly by a conductive material.

25 13. A method of manufacturing a display device according to Claim 12, wherein the high resistance conductive film is a selected one of Cr, Ti, Ta, Mo,

W, Ni, an alloy of those metals, and a laminated film of those metals, and the low resistance conductive film is a selected one of Al, Cu, Au, Ag, an alloy of those metals, and a laminated film of those metals.

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14. A method of manufacturing a display device according to Claim 12, wherein the high resistance conductive film is a selected one of Cr, Ti, Ta, Mo, W, Ni, an alloy of those metals, and a laminated film of those metals, and the low resistance conductive film is a selected one of Al and an alloy of Al.

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15 15. A method of manufacturing a display device according to Claim 12, wherein the external line and the external line terminal are formed in the same step as forming a scan line for driving the pixels.

20 16. A method of manufacturing a display device according to Claim 12, wherein the lead line and the line terminal are formed in the same step as forming a signal line crossing a scan line for driving the pixels through an insulating film.

25 17. A method of manufacturing a display device according to Claim 12, wherein the transparent conductive film is formed in the same step as forming

a pixel electrode of the pixel.

18. A method of manufacturing a display device according to Claim 12, further comprising a step of  
5 connecting a terminal of the drive circuit and a terminal of an adjacent drive circuit in such a way that each of the terminals is directly connected to the low resistance conductive film by a conductive material in a near proximity to each of sides of the  
10 drive circuits facing each other.

19. A method of manufacturing a display device according to Claim 12, wherein the external terminal is connected directly to an external unit by a  
15 conductive material formed in the same step as the conductive material used for connecting the terminals of the drive circuit mounted directly in the insulating substrate to the line terminal and to the external line terminal.